A 36-year-old man was stabbed in the neck. His left occipital artery was repaired. Ten years later, he noticed a left ear bruit and experienced intermittent paresthesias in the left trigeminal and C5 distributions and bilaterally below the knees. He had a 3-day episode of generalized incoordination. Examination revealed a pulsatile mass and loud bruit below the left occiput with mild weakness and decreased reflexes in the left arm.

MRI (figure 1) and angiography (figure 2) revealed brainstem and cervical cord hyperintensity due to a high-flow vertebovertebral arteriovenous fistula. His symptoms and MRI changes probably reflected venous hypertension: 6 weeks after endovascular occlusion they had resolved, and there was no fistula recurrence on repeat angiography.

REFERENCES

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Figure 2  Angiograms of a high-flow left vertebrovertebral arteriovenous fistula

The fistula draining veins (A, B, white arrowheads) drew all flow from the left vertebral artery (LVA) (A). Most of the right vertebral artery flow (RVA) (B) and significant bilateral carotid flow (not shown) also drained to the fistula via retrograde flow in the distal LVA. There was resolution after endovascular occlusion (Coil) (C, D).
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